

WHAT IS CLAIMED IS:

1. A method of cleaning a material contaminated with a radioactive contaminant, comprising the step of contacting the material with a cleaning composition comprising:
  - 5 (a) an oil solubilizing amount of a degreaser;
  - (b) a rubber solvent; and
  - (c) a polar, organic diluent; wherein at least one of the degreaser, rubber solvent, and the polar, organic diluent has a flash point of at least 30°F.
- 10 2. The method of claim 1, wherein the cleaning composition comprises 1 to 20 parts by weight of the degreaser per 5 to 70 parts of the rubber solvent and 5 to 70 parts by weight of diluent per 5 to 70 parts by weight of the rubber solvent.
3. The method of claim 1, wherein the degreaser comprises a glycol ether.
- 15 4. The method of claim 3 wherein each of the degreaser, rubber solvent, and the polar, organic diluent has a flash point of at least 30°F.
5. The method of claim 1, wherein the rubber solvent comprises an aliphatic
- 20 hydrocarbon solvent.
6. The method of claim 5, wherein the hydrocarbon solvent comprises an aliphatic naphtha.
- 25 7. The method of claim 1, wherein the diluent comprises an alcohol having at least about 5 carbon atoms.
8. The method of claim 7, wherein the alcohol is selected from hexanol and iso-hexanol.

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9. The method of claim 1, wherein the degreaser comprises glycol ether, the rubber solvent comprises an aliphatic naphtha, and the diluent comprises an alcohol.
10. The method of claim 3 wherein each of the degreaser, rubber solvent, and the polar,  
5 organic diluent has a flash point of at least 50°F.
11. The method of claim 3 wherein each of the degreaser, rubber solvent, and the polar, organic diluent has a flash point of at least 65°F.
- 10 12. The method of claim 1, further comprising the step of contacting the material with at least one additional fluid composition.
13. The method of claim 1, wherein said contact with the additional fluid composition occurs after contact with the cleaning composition.
- 15 14. A hand cleaning composition, comprising:
- (a) an oil solubilizing amount of a degreaser;
  - (b) a rubber solvent; and
  - (c) a polar, organic diluent; wherein at least one of the degreaser, rubber solvent,  
20 and the polar, organic diluent has a flash point of at least 30°F.
15. The cleaning composition of claim 14, wherein the cleaning composition comprises 1 to 20 parts by weight of the degreaser per 5 to 70 parts of the rubber solvent and 5 to 70 parts by weight of diluent per 5 to 70 parts by weight of the rubber solvent.
- 25 16. The cleaning composition of claim 14, wherein the degreaser comprises a glycol ether.
17. The cleaning composition of claim 14 wherein each of the degreaser, rubber solvent,  
30 and the polar, organic diluent has a flash point of at least 30°F.

18. The cleaning composition of claim 14, wherein the rubber solvent comprises an aliphatic hydrocarbon solvent.

5 19. The cleaning composition of claim 14, wherein the rubber solvent comprises an aliphatic naphtha.

20. The cleaning composition of claim 14, wherein the diluent comprises an alcohol having at least about 5 carbon atoms.

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21. The cleaning composition of claim 20, wherein the alcohol is selected from hexanol and iso-hexanol.

22. The cleaning composition of claim 14, wherein the degreaser comprises glycol ether,  
15 the rubber solvent comprises an aliphatic naphtha, and the diluent comprises an alcohol.

23. The cleaning composition of claim 14 wherein each of the degreaser, rubber solvent, and the polar, organic diluent has a flash point of at least 50°F.

20 24. The cleaning composition of claim 14 wherein each of the degreaser, rubber solvent, and the polar, organic diluent has a flash point of at least 65°F.

25. A method of cleaning a material comprising a radioactive contaminant, comprising the step of contacting the material with an organic degreaser composition.

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